

PART B - FEE(S) TRANSMITTAL

1875.0210000

Complete and send this form, together with applicable fee(s), to: **Mail**

Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

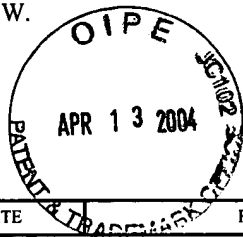
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

26111

7590

01/16/2004

STERNE, KESSLER, GOLDSTEIN & FOX PLLC
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005



Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,034	02/15/2001	Reza-Ur Rahman Khan	1875.0210000	5713

TITLE OF INVENTION: ~~ENHANCED DIE-DOWN BALL GRID ARRAY AND METHOD FOR MAKING THE SAME~~

Die-Down Ball Grid Array Package with Die-Attached Heat Spreader and Method for Making the Same

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	04/16/2004

EXAMINER	ART UNIT	CLASS-SUBCLASS
ANDUJAR, LEONARDO	2826	257-707000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Sterne, Kessler,
Goldstein & Fox, P.L.L.C.
 2 _____
 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Broadcom Corporation

Irvine, CA

Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual ☒ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee
- ☒ Publication Fee
- ☒ Advance Order - # of Copies 3

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☒ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature) Jeffrey S. Weaver (Date) 4-13-04

Jeffrey S. Weaver 45,608

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.**

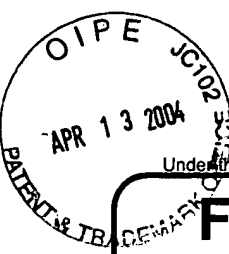
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

04/14/2004 YPOLITE2 00000044 09783034

01 FC:1501
 02 FC:1504
 03 FC:8001

1330.00 OF
 300.00 OF
 9.00 OF

TRANSMIT THIS FORM WITH FEE(S)



FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 1,639.00

Complete if Known

Application Number 09/783,034
Filing Date February 15, 2001
First Named Inventor Reza-Ur Rahman Khan
Examiner Name Andujar, L.
Art Unit 2826
Attorney Docket No. 1875.0210000

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☒ Other** ☐ None

☐ **Charge any deficiencies or credit any overpayments in Deposit Account: the fees to Deposit Acct. No. 19-0036

Deposit Account Number
Deposit Account Name

19-0036

Sterne Kessler, Goldstein & Fox P.L.L.C.

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments

☐ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims - 20 ** = X =
Independent Claims - 3 ** = X =
Multiple Dependent =

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	1330.00
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) Publication Fee; Advance copies of patent fee

300.00; 9.00

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

SUBMITTED BY

(Complete if applicable)

Name (Print/Type) Jeffrey S. Weaver
Registration No. (Attorney/Agent) 45,608
Telephone (202) 371-2600
Signature *Jeffrey S. Weaver*
Date 4-13-04

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Robert Greene Sterne
Edward J. Kessler
Jorge A. Goldstein
David K.S. Cornwell
Robert W. Esmond
Tracy-Gene G. Durkin
Michele A. Cimbala
Michael B. Ray
Robert E. Sokohl
Eric K. Steffe
Michael Q. Lee
Steven R. Ludwig
John M. Covert
Linda E. Alcorn
Robert C. Millonig
Donald J. Featherstone
Lawrence B. Bugalsky
Michael V. Messinger

Judith U. Kim
Timothy J. Shea, Jr.
Patrick E. Garrett
Heidi L. Kraus
Edward W. Yee
Albert L. Ferro*
Donald R. Banowitz
Peter A. Jackman
Teresa U. Medler
Jeffrey S. Weaver
Kendrick P. Patterson
Vincent L. Capuano
Eldora Ellison Floyd
Thomas C. Fiala
Brian J. Del Buono
Virgil Lee Beason
Kimberly N. Reddick
Theodore A. Wood

Elizabeth J. Haanes
Joseph S. Ostroff
Frank R. Cottingham
Christine M. Lhulier
Rae Lynn Prengaman
Jane Shershenovich*
George S. Bardmesser
Daniel A. Klein*
Jason D. Eisenberg
Michael D. Specht
Andrea J. Kamage
Tracy L. Muller*
LuAnne M. DeSantis
John J. Figueroa
Ann E. Summerfield
Tiera S. Coston
Aric W. Ledford*
Jessica L. Parezo

Timothy A. Doyle*
Gaby L. Longworth*
Nicole D. Dretar*
Ted J. Ebersole
Jyoti C. Iyer*
Registered Patent Agents*
Karen R. Markowicz
Nancy J. Leith
Helene C. Carlson
Matthew J. Dowd
Aaron L. Schwartz
Katrina Y. Pei Quach
Bryan L. Skelton
Robert A. Schwartzman
Teresa A. Colella
Jeffrey S. Lundgren
Victoria S. Rutherford

Eric D. Hayes
Michelle K. Holoubek
Robert H. DeSels
Simon J. Elliott
Julie A. Heider
Mita Mukherjee
Scott M. Woodhouse

Of Counsel
Kenneth C. Bass III
Evan R. Smith
Marvin C. Guthrie

*Admitted only in Maryland
*Admitted only in Virginia
*Practice Limited to
Federal Agencies

April 13, 2004

WRITER'S DIRECT NUMBER:

(202) 772-8831

INTERNET ADDRESS:

JWEAVER@SKGF.COM

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Mail Stop Issue Fee

Re: Allowed U.S. Utility Patent Application
Appl. No. 09/783,034; Filed: February 15, 2001
For: **Die-Down Ball Grid Array Package with Die-Attached Heat Spreader
and Method for Making the Same**

Inventors: Khan *et al.*
Our Ref: 1875.0210000

Sir:

In response to the **Notice of Allowance and Issue Fee Due** dated January 16, 2004, the following documents are forwarded for appropriate action by the U.S. Patent and Trademark Office:

1. Issue Fee Transmittal (Form PTOL-85B);
2. Fee Transmittal (Form PTO/SB/17);
3. Return postcard; and
4. PTO-2038 Credit Card Payment Form for \$1,639.00 to cover:
\$1,330.00 Issue Fee;
\$9.00 Advance copies of patent; and
\$300.00 Publication Fee.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier.

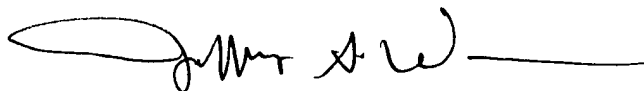
The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036. If extensions of time under 37 C.F.R. § 1.136 other than those otherwise provided for herewith are required to prevent abandonment of the present patent application, then such extensions of time are hereby

Commissioner for Patents
April 13, 2004
Page 2

petitioned, and any fees therefor are hereby authorized to be charged to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Jeffrey S. Weaver", followed by a horizontal line.

Jeffrey S. Weaver
Attorney for Applicants
Registration No. 45,608

JSW/asl
Enclosures

251565v1